## State of California AIR RESOURCES BOARD

# EXECUTIVE ORDER A-10-286 Relating to Certification of New Motor Vehicles

#### FORD MOTOR COMPANY

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1985 model-year Ford Motor Company exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

| Engine Family | Displacement<br>Cubic Inches (Liters) |       | Exhaust Emission Control Systems (Special Features)  |  |  |
|---------------|---------------------------------------|-------|--|--|--|
| FFM2.3V5HCH6  | 140                                   | (2.3) | Air Injection - Pump<br>Exhaust Gas Recirculation<br>Three-Way Catalyst with Closed Loop<br>(Central Fuel Injection) |  |  |

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The following are the certification emission standards for this engine family to be listed on the window decal required by "California Assembly-Line Test Procedures for 1983 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles":

| Hydrocarbons   | Carbon Monoxide | Nitrogen Oxides |
|----------------|-----------------|-----------------|
| Grams per Mile | Grams per Mile  | Grams per Mile  |
| 0.39           | 7.0             | 0.7             |

The following are the certification emission values for the above engine family:

| Hydrocarbons<br>Grams per Mile | Carbon Monoxide<br>Grams per Mile | Grams per Mile |
|--------------------------------|-----------------------------------|----------------|
| 0.31                           | 2.4                               | 0.6            |

BE IT FURTHER RESOLVED: That the listed models were certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.15 of Title 13, California Administrative Code which includes repair or replacement of emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" (Title 13, California Administrative Code, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards as stipulated in "California Exhaust Emission Standards and Test Procedures for 1981 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036) and Health and Safety Code Section 43204, provided, however, that jurisdiction is hereby reserved to modify these provisions to the extent made necessary by an EPA waiver decision, in order to assure that the listed vehicles comply with the minimum federal requirements applicable in California.

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this  ${\mathcal A}^{\mathcal M}$ 

day of August, 1984.

K. D. Drachand, Chief Mobile Source Division

TC-Turbocharged

| Manufacturer Ford Motor Company | Executive Order No. | A-10-286  |
|---------------------------------|---------------------|-----------|
| Engine Family FFM2.3V5HCH6      | Evaporative Family  | 5FM       |
|                                 | Engine CID (Liters) | 140 (2.3) |

### **ABBREVIATIONS**

| Ignition System .                                    | Exhaust Emissions Control System          | Special Features          |
|--|---|---------------------------|
| CA-Centrifugal Advance                               | AIP-Air Injection-Pump                    | CCV-Combustion            |
| EEC-Electronic Engine Control EI-Electronic Ignition | AIV-Air Injection-Valve<br>CL-Closed Loop | Chamber Valve             |
|  | EGR-Exhaust Gas Recirculation             | CFI-Central Fuel          |
| ESAC-Electronic Spark Advance Control                | EM-Engine Modification                    | Injection \<br>DID-Diesel |
| VA-Vacuum Advance                                    | OC-Oxidation Catalyst System              | Injection-                |
| VR-Vacuum Retard                                     | TOC-Trap Oxidizer Continual               | Direct                    |
|  | TOP-Trap Oxidizer Periodical              | DIP-Diesel                |
|  | TR-Thermal Reactor                        | Injection-                |
|  | TWC-Three-Way Catalyst System             | Prechamber                |
| Fuel System  | • • •                                     | EFI-Electronic            |
| CFI, CL, DID, DIP, EFI, MFI                          |   | Fue1                      |
| nV-nVenturi Carburetor                               |   | Injection                 |
| -Variable Venturi                                    |   | IC - Intercooler          |
|  |   | MFI-Mechanical            |
|  |   | Fue l                     |
|  |   | Injection                 |
|  |   |                           |

# VEHICLE MODELS:

| Vehicle Line | Body Type        | Body Code  |                  |
|--------------|------------------|------------|------------------|
| Ford         |                  |            |                  |
| Tempo        | 2-Door<br>4-Door | 66D<br>54D | Tempo L, GL, GLX |
| Mercury      |                  |            |                  |
| Topaz        | 2-Door<br>4-Door | 66D        | Topaz L, GS, LS  |

DRIVE SYSTEM: Front Engine/ Front -Wheel Drive

E.O. FA-10-286 1985 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET x Passenger Cars \_\_\_ Light-Duty Trucks \_\_\_ Medium-Duty Vehicles x Gas \_\_\_ Diesel Page Manufacturer Ford Motor Company Engine Engine Family \_\_\_\_FFM2.3V5HCH6 5-25Q-R00, Code CID (Liter)-ECS (Special Features) EGR/AIP/TWC/EEC/CL/CFI 140 (2.3) I-4 Type \_\_\_\_ Ign. System Fuel System EGR Valve Equiv. Labe\* Engine Vehicle Models Trans. Iden: Test (If Coded see Code EEC-IV CFI Weight attachment) Part No. Part No. Part No. Part Non-A/C Dyno Hp) MTX 2875 E53F-12A650-GA E53E-9C973-CB E53E-9F483- E5AE-9C485-5-25Q-R00A FTPZ-66D FTPZ-54D (M50D) AC CEY MTPZ-66D MTPZ-54D 2750 5-25Q-R00N FTPZ-66D FTPZ-54D MTPZ-54D 2875 MTPZ-66D

Comments: See page one for abbreviations and evaporative emission family identification.

\*All DPA values are: 6.3 non-A/C

Revised

| Engine Family F2.3VCH |         |
|-----------------------|---------|
| Issue Date   7-13-84  | 16.03-3 |

1985 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

| x_ Pass        |   |                           |                          | Medium-Du                   | •                            |                   | Diesel               |
|----------------|---|---------------------------|--------------------------|-----------------------------|------------------------------|-------------------|----------------------|
|                |   | Ford Motor<br>FM2.3V5HCH6 | Company                  |                             | Page Engine                  | 3<br>5-26R-R01    |                      |
| Engi<br>ECS    | ne Family <u>F</u><br>(Special Featu                      |                           | AIP/TWC/E                | EEC/CL/CFI                  | Code<br>CID (Liter)-<br>Type | 140 (2.3)         |                      |
| Engine<br>Code | Vehicle Mod<br>(If Coded s<br>attachment<br>(Non-A/C Dyno | e <b>e</b><br>)           | Equiv.<br>Test<br>Weight | Ign. System EEC-IV Part No. | Fuel System CFI Part No.     | EGR Valve         | Labe<br>Iden<br>Part |
| 5-26R-R01A     | FTPZ-66D<br>FTPZ-54D<br>MTPZ-66D<br>MTPZ-54D              | · (A3)                    | 2875<br>3000             | E53F-12A650-EA              | E53E-9C973-DB                | E53E-9F483-<br>BC | E5AE-9C48<br>CHE     |
| 5-26R-R01N     | FTPZ-66D<br>FTPZ-54D<br>MTPZ-54D<br>MTPZ-66D              |                           | 2750<br>2875<br>-        |                             | ·                            |                   |                      |
| <b>—</b>       |   |                           | ÷                        |                             |                              |                   |                      |
|                |   |                           |                          |                             |                              |                   |                      |
|                |   |                           |                          |                             |                              |                   |                      |
| Comments:      | See page one  | for abbrevi               | ations a                 | nd evaporative              | emission fami                | ly identific      | ation.               |

\*All DPA values are: 6.3 non-A/C

Engine Family F2.3VCH

| Issue Date | 7-13-84 | 16.03-4 |  |
|------------|---------|---------|--|
| Revised    |         |         |  |

|                |  |          |                              | ARD SUPPLEMENTA    |                        |                   |                    |
|----------------|--|----------|------------------------------|--------------------|------------------------|-------------------|--------------------|
| × Pass         | enger Cars Li                                  | ght-Duty | Trucks                       | Medium-Du          | uty Vehicles .         | x Gas             | Diesel             |
| Manu           | facturer Ford                                  |          | •                            |                    | Page                   | 4                 |                    |
| ( Engi         | ne Family FFM2.3                               | 75нсн6   |                              |                    |                        | 5-25P-R00         |                    |
| ECS            | (Special Features)                             | EGR/A    | AIP/TWC/I                    | EEC/CL/(CFI)       | CID (Liter)-<br>Type _ | 140 (2.3) I-4     |                    |
| Engine<br>Code | Vehicle Models<br>(If Coded see<br>attachment) | Trans.   | Equiv.<br>Test<br>Weight     | Ign. System EEC IV | Fuel System<br>CFI     | EGR Valle         | Labe<br>Iden       |
|                | kitowya kan ana kan                            |          |                              | Part No.           | Part No.               | Part No.          | Part               |
| 5-25P-R00A     | FTPZ-66D<br>FTPZ-54D ·<br>MTPZ-66D<br>MTPZ-54D | м5       | 2750                         | E53F-12A650-MA     | E53E-9C973-AC          | E53E-9F483-<br>AC | <b>E5AE-9</b> C485 |
| 5-25P-ROON     | FTPZ-66D<br>FTPZ-54D<br>MTPZ-66D<br>MTPZ-54D   |          | 2750<br>2875<br>2750<br>2875 |                    |                        | ·                 |                    |
|                |  |          |                              |                    |                        |                   |                    |
| •              |  |          | ÷                            |                    |                        |                   |                    |
|                |  |          |                              |                    |                        |                   |                    |
| Comments:      | See page one for *DPA values are a             |          |                              |                    | emission fami          | ly identific      | ation.             |

Engine Family F2.3VCH

| Issue Date | 10/17/84 | 16.03-5 |
|------------|----------|---------|
| Revised    |          |         |

| ECS            | ine Family FFM2. (Special Features)            | EGR/.         | AIP/TWC/E                | EEC/CL(CFI)        | Code<br>CID (Liter)-<br>Type _ | 140 (2.3)         | I-4                                    |
|----------------|--|---------------|--------------------------|--------------------|--------------------------------|-------------------|--|
| Engine<br>Code | Vehicle Models<br>(If Coded see<br>attachment) | Trans.        | Equiv.<br>Test<br>Weight | Ign. System EEC-IV | Fuel System<br>CFI             | EGR Valve         | Labe<br>Iden                           |
|                | (Non-A/C Dyno Hp)                              |               |                          | Part No.           | Part No.                       | Part No.          | Part                                   |
| 5-26R-R11A     | FTPZ-66D<br>FTPZ-54D<br>MTPZ-66D               | AT            | 2875                     | E53F-12A650-EA     | E53E-9C973-DB                  | E53E-9F483-<br>BC | E5AE-90<br>CHE                         |
|                | MTPZ-54D                                       |               | 3000                     |                    |                                |                   |  |
| 5-26R-R11N     | FTPZ-66D<br>FTPZ-54D<br>MTPZ-54D               |               | 2750<br>2875             | :                  |                                |                   |  |
|                | MTPZ-66D                                       |               |                          | ·                  |                                |                   |  |
|                |  |               | ·                        | ·                  |                                |                   |  |
| 25Q-R10A       | FTPZ-66D<br>FTPZ-54D .<br>MTPZ-66D<br>MTPZ-54D | <b>MTX-</b> 5 | 2875                     | E53F-12A650-GA     | E53E-9C973-CB                  | E53E-9F483-<br>AC | E5AE-9(<br>CEY                         |
| 5Q-R10N        | FTPZ-66D<br>FTPZ-54D<br>MTPZ-54D               |               | 2750                     |                    |                                |                   |  |
|                | MTPZ-66D                                       |               | 2875                     |                    |                                |                   |  |
| Comments:      | See page one for                               | abbrevi       | ations a                 | nd evaporative     | emission fami                  | ly identific      | ation.                                 |
|                | *All DPA values                                | are: 6.3      | 3 non-A/C                |                    | •                              |                   |  |
|                |  |               |                          |                    |                                |                   | ······································ |

| Manu           | 1985 AIR RESOURCES BOARD SUPPLEMENT  Light-Duty Trucks Medium-D  Ford Motor Company  FFM2.3V5HCH6 |       |            |                          | Page 6 Engine 5-26R-R16 |                        |                   |                        |
|----------------|---|-------|------------|--------------------------|-------------------------|------------------------|-------------------|------------------------|
| ECS            | (Special Feat   | ures) | EGR/AII    | /TWC/EEC                 | /CL/CFI                 | CID (Liter)-<br>Type _ | 140 (2.3) I       | -4                     |
| Engine<br>Code | Vehicle Mc<br>(If Coded<br>attachmen  | see   | Trans.     | Equiv.<br>Test<br>Weight | Ign. System             | Fuel System            | EGR Valve         | Label<br>Ident.        |
|                | (Non-A/C Dyn  |       |            |                          | Part No.                | Part No.               | Part No.          | Part No                |
| 5-26R-R16A     | FTPZ-66D<br>FTPZ-54D<br>MTPZ-66D<br>MTPZ-54D  | ·     | AT<br>(A3) | 2875<br>3000             | E63F-12A650-<br>TJE     | E63F-9C973-FA          | E53E-9F483-<br>BC | E5AE-<br>9C485-<br>CUZ |
| 5-26R-R16N     | FTPZ-66D<br>FTPZ-54D<br>MTPZ-54D<br>MTPZ-66D  |       |            | 2750                     | •                       |                        |                   |                        |
|                |   |       |            | .·                       |                         | •                      |                   |                        |

Comments: See page one for abbreviations and evaporative emission family identification.

R/C 2.3P-17 081385